



Using Population Health Management to Improve System Performance

Mike Hindmarsh, RISE Coach

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Adapted from Robert Reid MD PhD, Chief Scientist Trillium Health Partners

ONTARIO HEALTH TEAMS – INTEGRATED & ACCOUNTABLE CARE SYSTEMS



NEWS

Ministry of Health and Long-Term Care

Building a Connected Public Health Care System for the Patient

February 26, 2019 9:00 A.M.

Ontario Health Teams

Ontario Health Teams are a new way of organizing and delivering services for patients. Local health care providers will be empowered to work as a connected team, taking on the work of easing transitions for patients across the continuum of care. Ontario Health Teams will be responsible for delivering all of the care for their patients, understanding their health care history and needs, and directly connecting them to the different types of care they need.

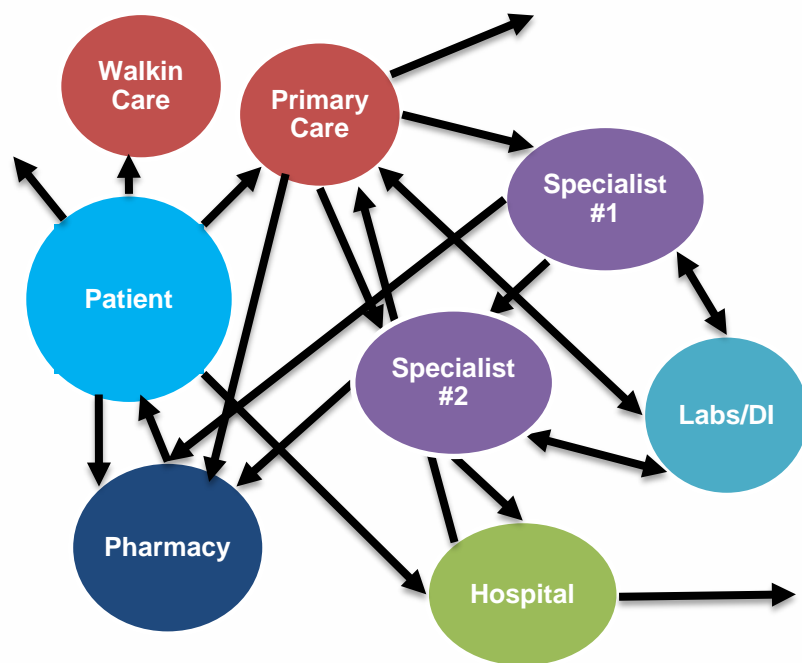
Patients would have help in navigating the public health care system 24/7. These teams would support continuous access to care and smooth transitions as patients move between one provider to another, and receive care in different locations or health care settings. Over time, Ontario Health Teams would provide seamless access to various types of health services, which could include:

- Primary care
- Hospitals
- Home and community care
- Palliative care
- Residential long-term care
- Mental health and addictions

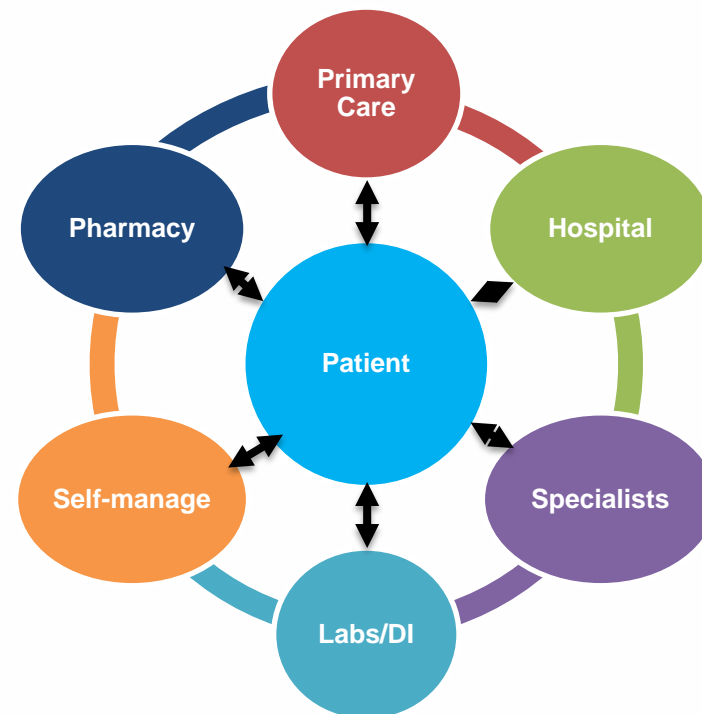
Ontario Health Teams will be funded and held accountable for improving patient experience and people's health.

ACCOUNTABLE CARE SYSTEMS

CURRENT STATE



INTEGRATED & ACCOUNTABLE CARE



ACCOUNTABLE CARE SYSTEMS

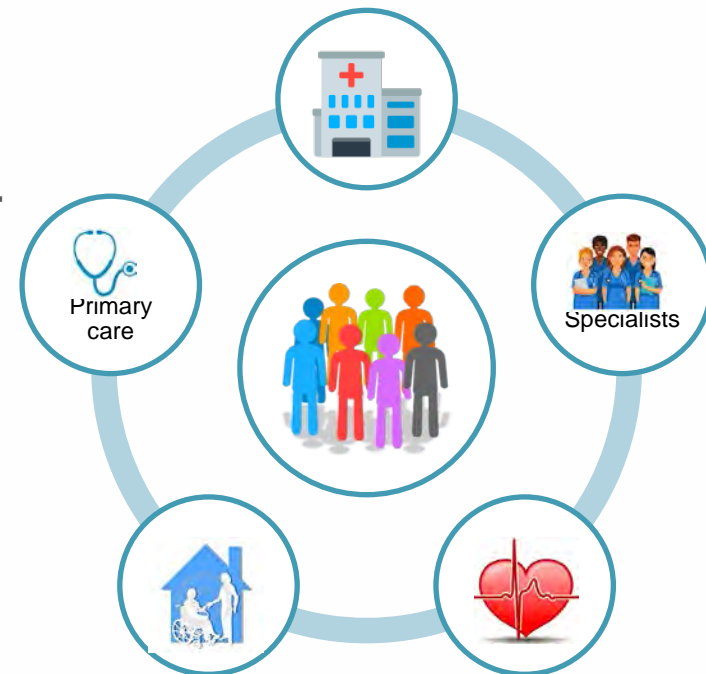
- Integrated care systems have different names across the world, such as:
 - US: “Accountable Care Organizations”, “Accountable Health Communities”
 - UK: “Accountable Care Systems”, “Sustainability and Transformation Partnerships”
 - Other: “Integrated Healthcare Organizations” (Spain)

Main Commonalities	Main Differences
<ul style="list-style-type: none"> • Organizations are held financially accountable for quality, experience and total costs of defined population 	<ul style="list-style-type: none"> • Diversity of populations and care delivery partnerships (hospitals, clinics, nursing homes, etc)
<ul style="list-style-type: none"> • Vertically integrate across the services spectrum with emphasis on primary care 	<ul style="list-style-type: none"> • Governance models and corporate structures
<ul style="list-style-type: none"> • Payment methods and incentives are aligned with delivering value, not simply paying for volume. 	<ul style="list-style-type: none"> • Degree of financial risk/gain sharing
<ul style="list-style-type: none"> • Population health management principles are proactively applied 	<ul style="list-style-type: none"> • Maturity of population health management infrastructures vary. Population definitions differ including geographic & attributable populations

ACCOUNTABLE CARE – A DEFINITION

In US, Accountable Care Organizations are defined as:

- Groups of primary care providers, specialists, hospitals and other healthcare providers that come together **voluntarily** to deliver **coordinated high quality, value-based care** to a **defined population**
- Build mechanisms to proactively coordinate & facilitate timely, efficient & person-centered care
- Together, groups agree to be **held accountable** to payors for “**Triple Aim**” **outcomes** for an **entire population** - quality of care, patient experience & per capita total costs

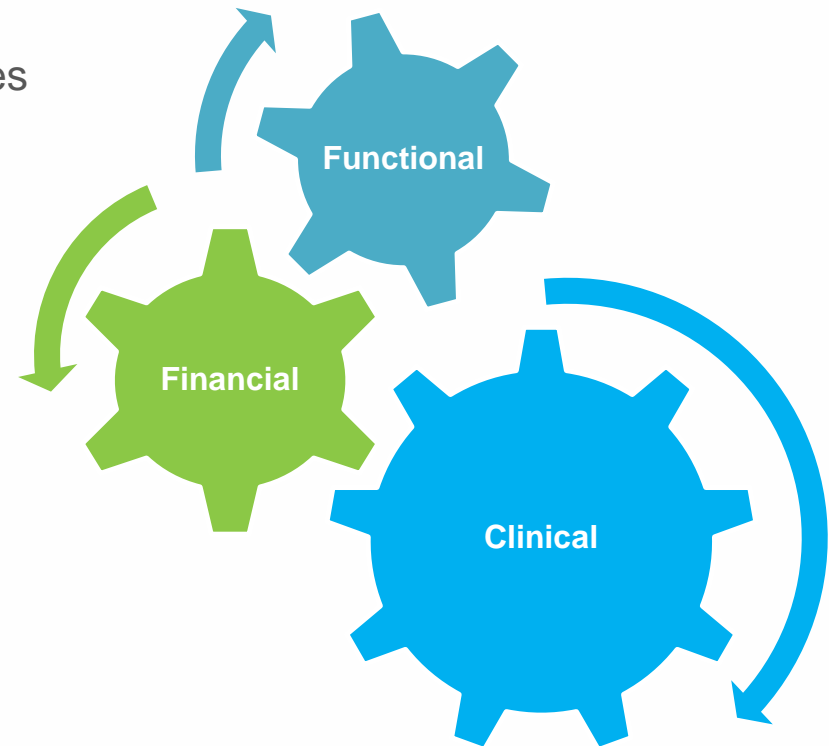


Adapted from McClellan M et al. *Health Aff (Millwood)*, 29(5), 982-990.

ACCOUNTABLE CARE – COMPONENTS

Necessary Components:

1. **Clinical Integration** - degree that patient services are experienced as continuous and coordinated across operating units by entire population (e.g., right care, right time, right place)
2. **Financial Integration** – payment methods and incentives that promote integration across operating units and achievement of triple aims
3. **Functional Integration** – leadership and management supports across operating units (e.g., back office support, IT, performance management, personnel, training)



Adapted from Shortell SM et al. Remaking Health Care in America: Building Organized Delivery Systems. 1996.

ACCOUNTABLE CARE - HOW DOES CARE CHANGE?

Example #1: Reducing Avoidable ER Use and Hospitalization

Frail elder with worsening congestive heart failure

Current state: Patient has increasing shortness of breath over the last week. Calls family physician's office and talks to receptionist. Told that doctor has no appointments and is directed to the ER. Goes to local ER where no prior records are available. Patient admitted. *No incentive for primary care to manage care upstream and avoid hospitalization.*

Future state: Patient has a primary care team who outreach chronic care patients regularly using IT system. Visiting nurse notices worsening shortness of breath and coordinates a prompt visit with primary care team. Medication and dietary changes made and patient avoids costly hospitalization. *Primary care incented to manage care upstream by sharing in the realized financial savings.*



ACCOUNTABLE CARE - HOW DOES CARE CHANGE?

Current State

Lack of clinical integration

“doctor has no appointments and is directed to the ER”



Future State

Clinical integration

“nurse notices worsening... and coordinates a prompt visit with primary care team. Medication and dietary changes made and hospitalization avoided.”

Lack of functional integration

“Goes to local ER where no prior records are available”



Functional integration

“Patient has a primary care team who outreach chronic care patients regularly using IT system”

Lack of financial integration

“No incentive for primary care to manage care upstream and avoid hospitalization”



Financial integration

“Primary care incented to manage care upstream by sharing in the realized financial savings.”

ACCOUNTABLE CARE SYSTEMS – 3 EXAMPLES

Montefiore - USA	Greater Manchester Health – UK	Canterbury District Health Board - NZ
Bronx, NY. Since 2012	Greater Manchester, UK. Since 2016	Canterbury, NZ. Since 2007
<ul style="list-style-type: none"> • 10 hospitals • 68 primary care sites – 1,250 PCPs • 73 specialty sites – 1,700 specialists • + other services 	<ul style="list-style-type: none"> • >30 hospitals & specialists • 500 primary care sites • + pharmacies, dental, mental health, public health, social problems (debt, poverty, education) 	<ul style="list-style-type: none"> • 5 major and +30 smaller hospitals • >112 primary care sites - 490 PCPs • 1,284 specialists • + other services
<ul style="list-style-type: none"> • Gain & risk sharing 	<ul style="list-style-type: none"> • Population capitation 	<ul style="list-style-type: none"> • Population capitation
405,200 people	2.7 million people	558,830 people
High burden chronic disease, low income, high per capita spending, diverse population	High burden chronic disease, 30% >65 years by 2032, and growing younger population	Largest older population in NZ, diverse population, rising chronic disease, obesity problem

Population Health Management Defined

Population health management refers to the process of improving clinical health outcomes of a defined group of individuals through improved care coordination and patient engagement supported by appropriate financial and care models.



<https://www.aha.org/center/population-health-management>

Population Health – A Definition

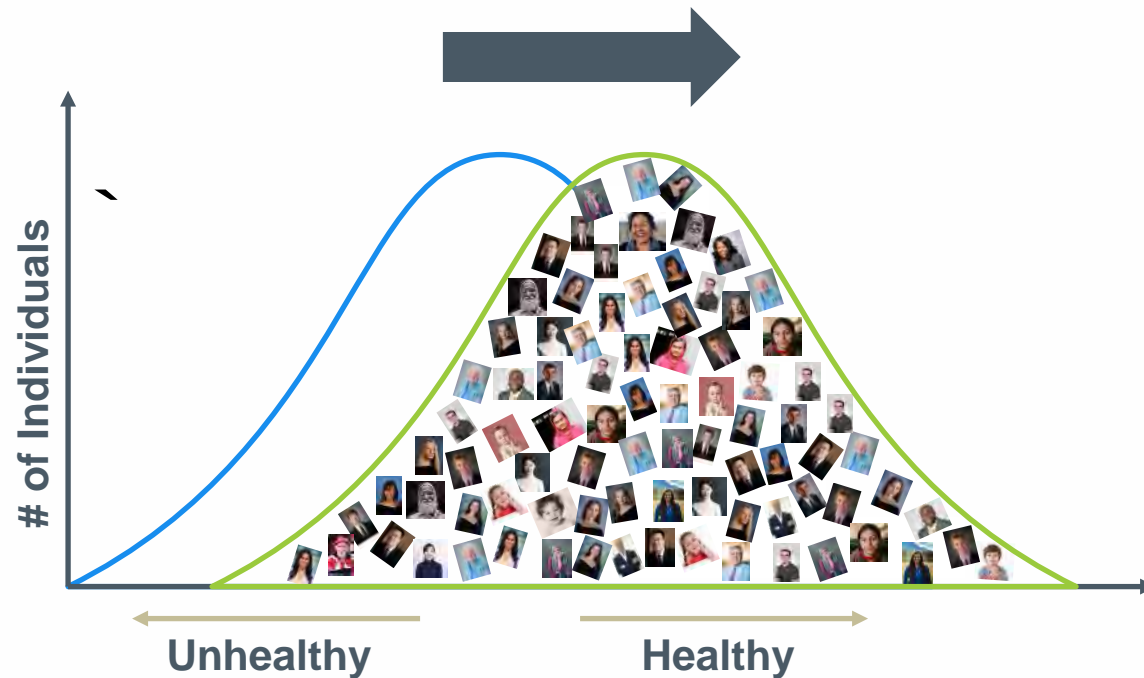
“The **health outcomes** of a **group** of individuals, including the **distribution** of such outcomes within a group.”

Kindig & Stoddart. AJPH 2002;93(3):380-3



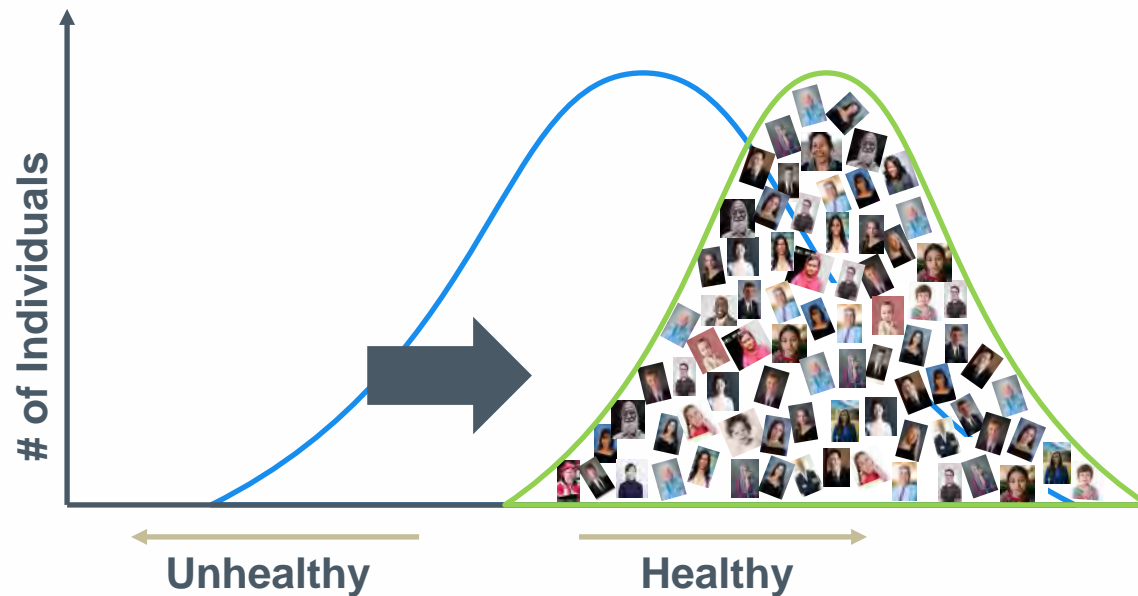
Population Health – A Definition

Population-wide approach
to **shift the curve**



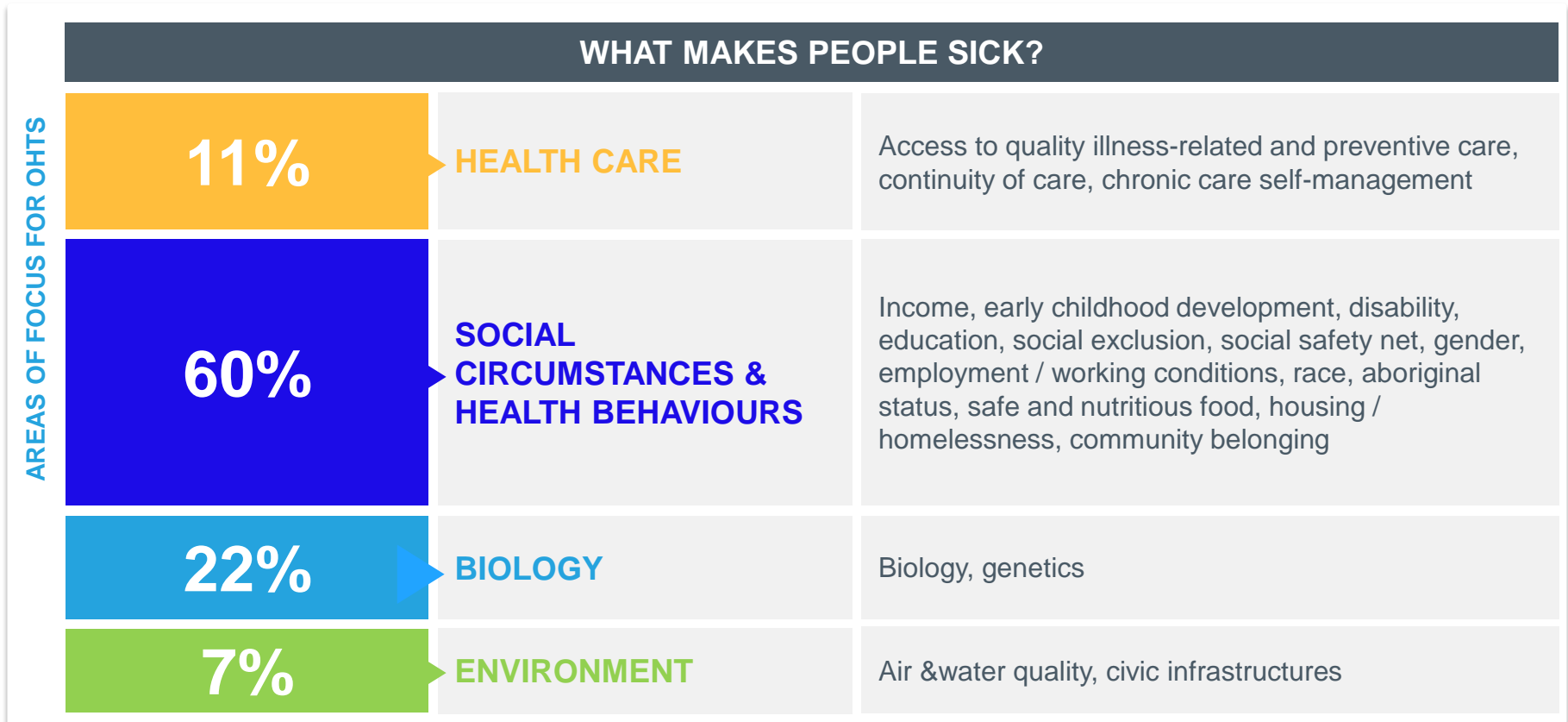
Population Health – A Definition

Strategies to **squeeze the curve**
& **reduce inequities**



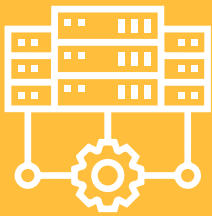
“LEAVE NO ONE BEHIND” & TACKLE THE “INVERSE CARE LAW”

Determinants of Health in Populations



Adapted from: determinantsofhealth.org

A Population Health Approach...



Identifies **systemic variations & patterns** in health & care



Focuses on the **conditions & factors** that are related & influence the health of populations



Develops services & policies to improve the health & well-being of populations



Implementation can be at the **individual or population level**

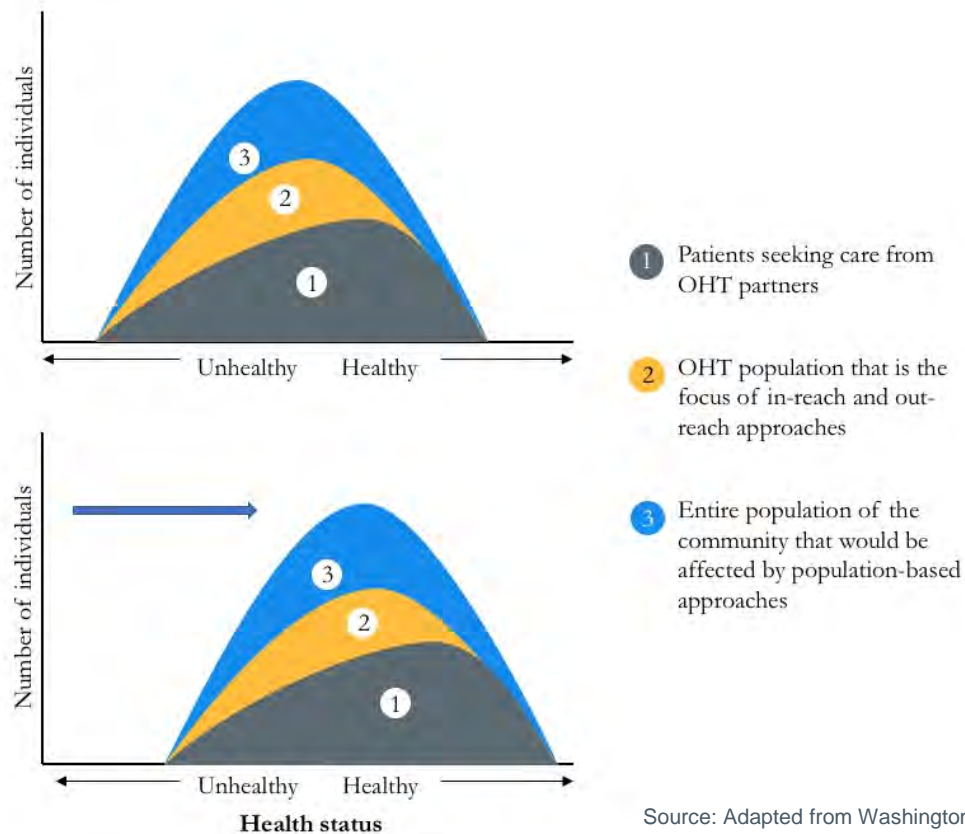
Developing OHT Population Health Strategies at the Level of the Individual & Population

EXAMPLES:

POPULATION	INDIVIDUAL-LEVEL SERVICE	POPULATION-LEVEL POLICY/PROGRAM
PERSONS NEARING END-OF-LIFE	Palliative care programs	Educational campaigns on advance care planning & powers of attorney
FRAIL OLDER ADULTS	Programs of All-inclusive Care for the Elderly (PACE)	Age-friendly transportation options, built environment initiatives
PERSONS WITH DEPRESSION	Systematic screening & diagnosis, self-management support programs	Manage mild and moderate in primary care

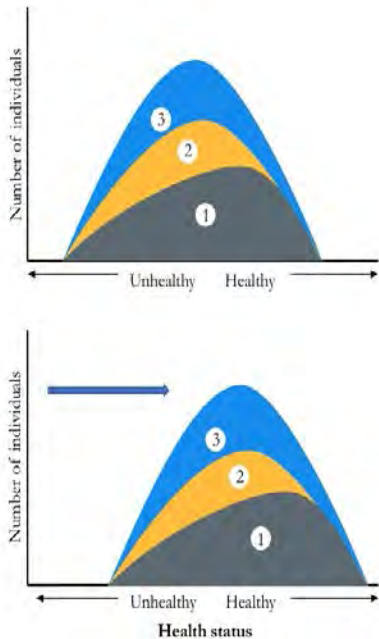
Role of Health Care in Producing Population Health

3 nested curves of population health



Source: Adapted from Washington AE et al. JAMA 2016 315(5); 459-460

Role of Health Care in Producing Population Health



① 1st Curve – Care for Acute Health Problems

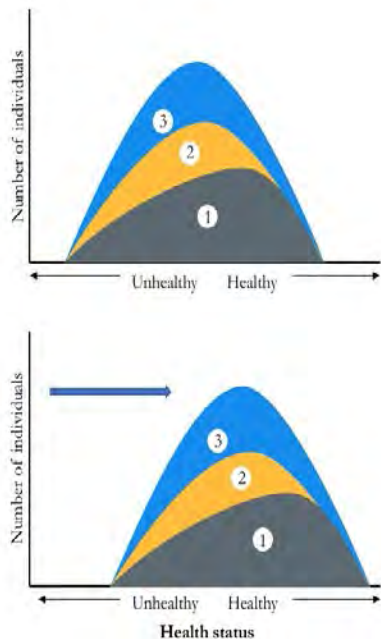
- Timely access to high-quality acute care services
- Oriented around care episodes (e.g. visits, hospitalizations)
- Reacts to individual patient needs, not populations
- Population health impact comes through users one-by-one (e.g. high-quality care for acute stroke)

“SUSTAIN THE GAINS”

Role of Health Care in Producing Population Health

1 2nd Curve – Clinical Population Health Management

- Proactive management of chronic conditions & behavioural risks
- Population is segmented to identify persons with common needs
- Uses an equity lens & addresses barriers
- Interventions are individually focused & proactively applied
- Apply “good clinical care” consistently to everyone across population segments

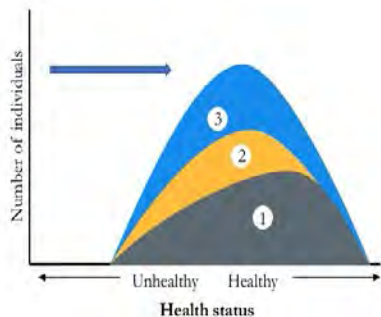
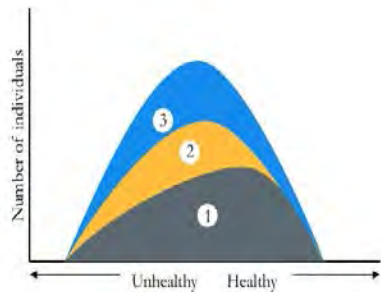


“NEW FOCUS FOR OHTS”

Role of Health Care in Producing Population Health

③ 3rd Curve – Population Policies & Interventions

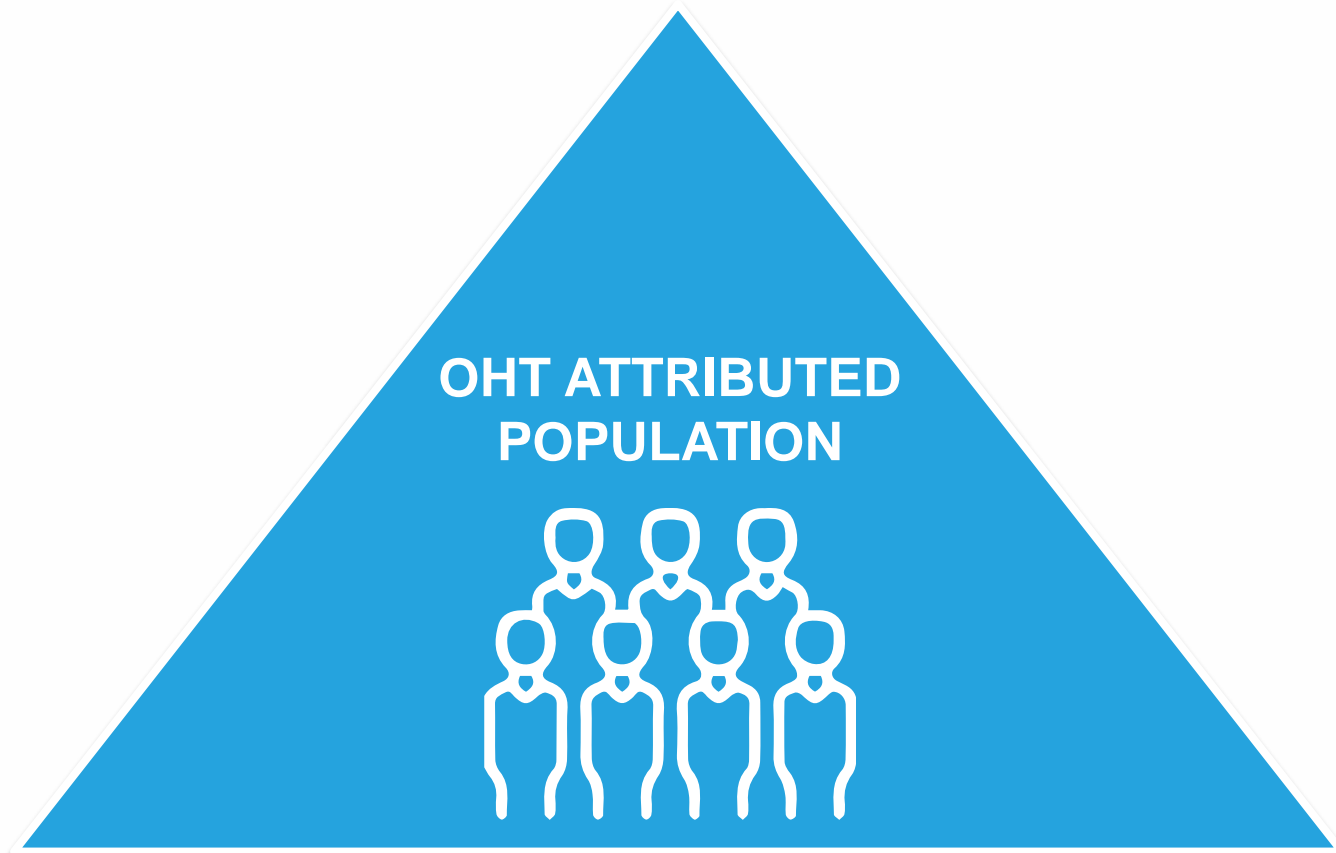
- Focus is non-medical determinants of health
- Oriented longitudinally over the lifespan across large populations
- Health care community's role can be to provide, facilitate or advocate



**“FUTURE FOCUS FOR OHTS
DEEPEN PARTNERSHIPS WITH LOCAL GOVT & COMMUNITY ORGS”**

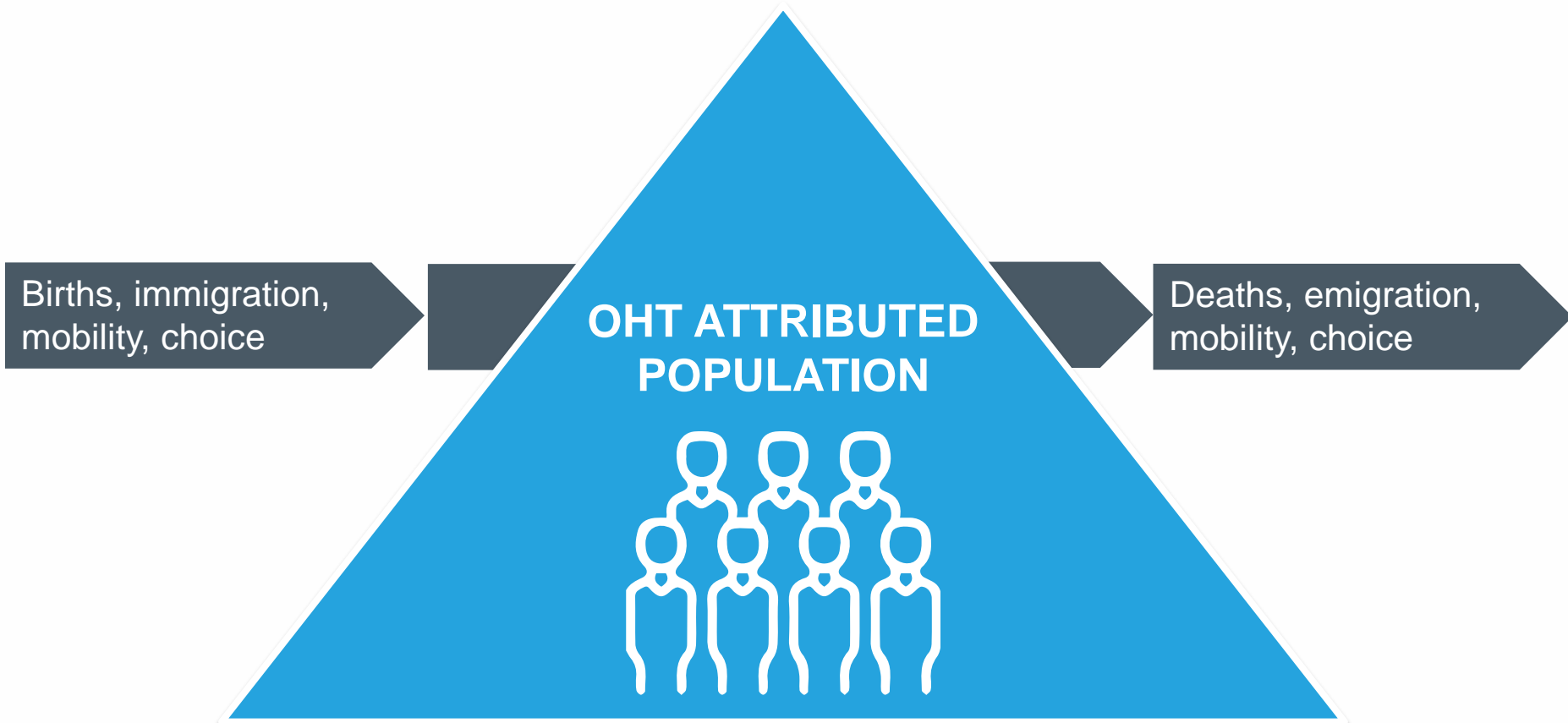
OHTs & Attributed Populations

Keep the Full Population in Sight



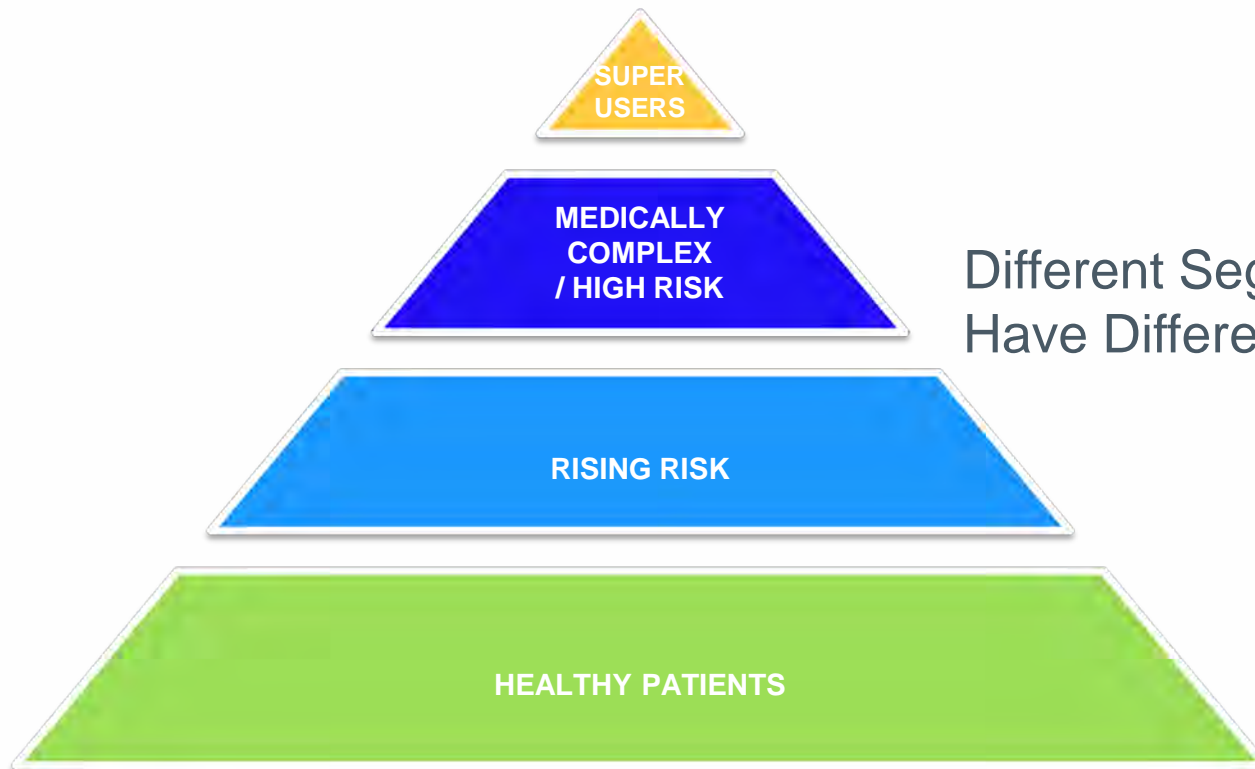
OHTs & Attributed Populations

Populations are Continually Evolving



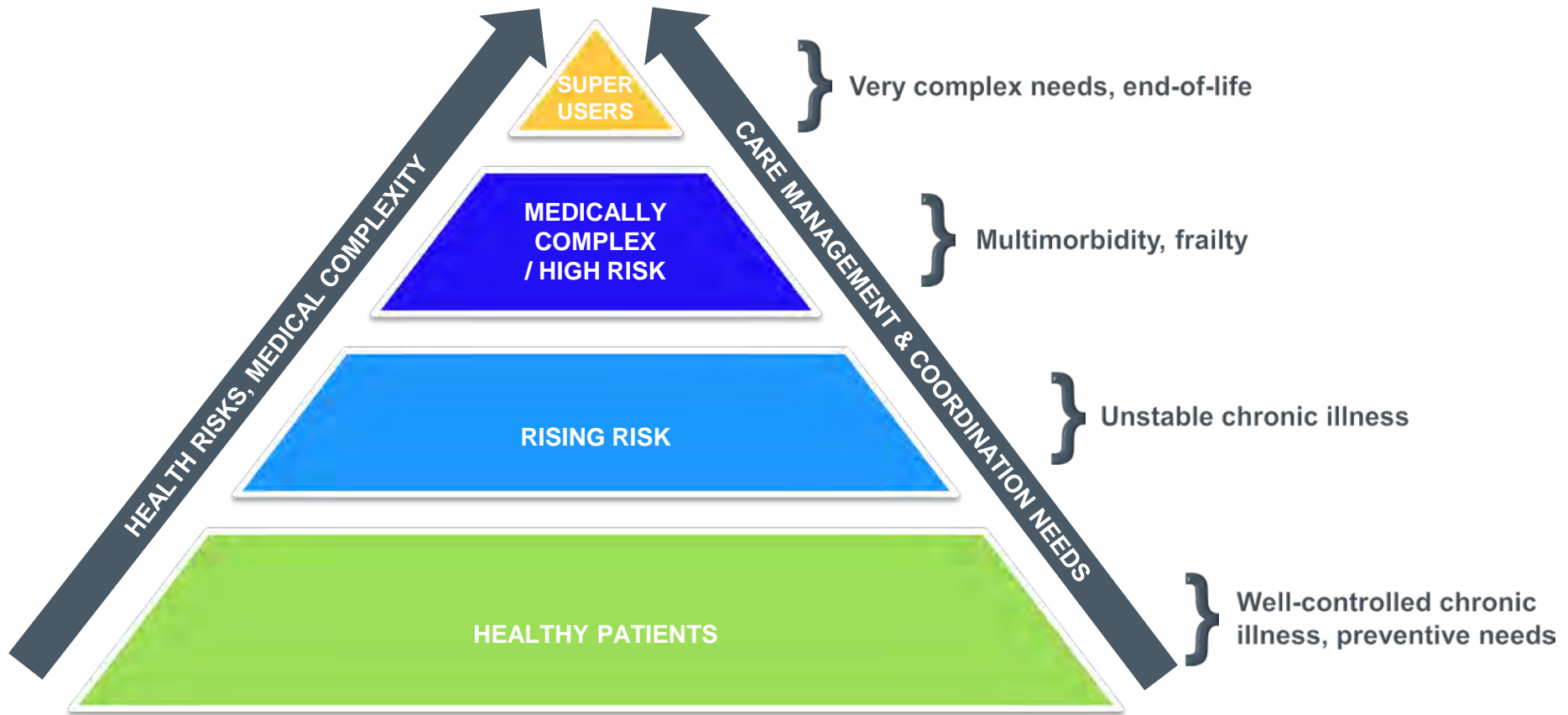
Step 1: Population Segmentation & Understanding Barriers to Care

Kaiser Risk Pyramid

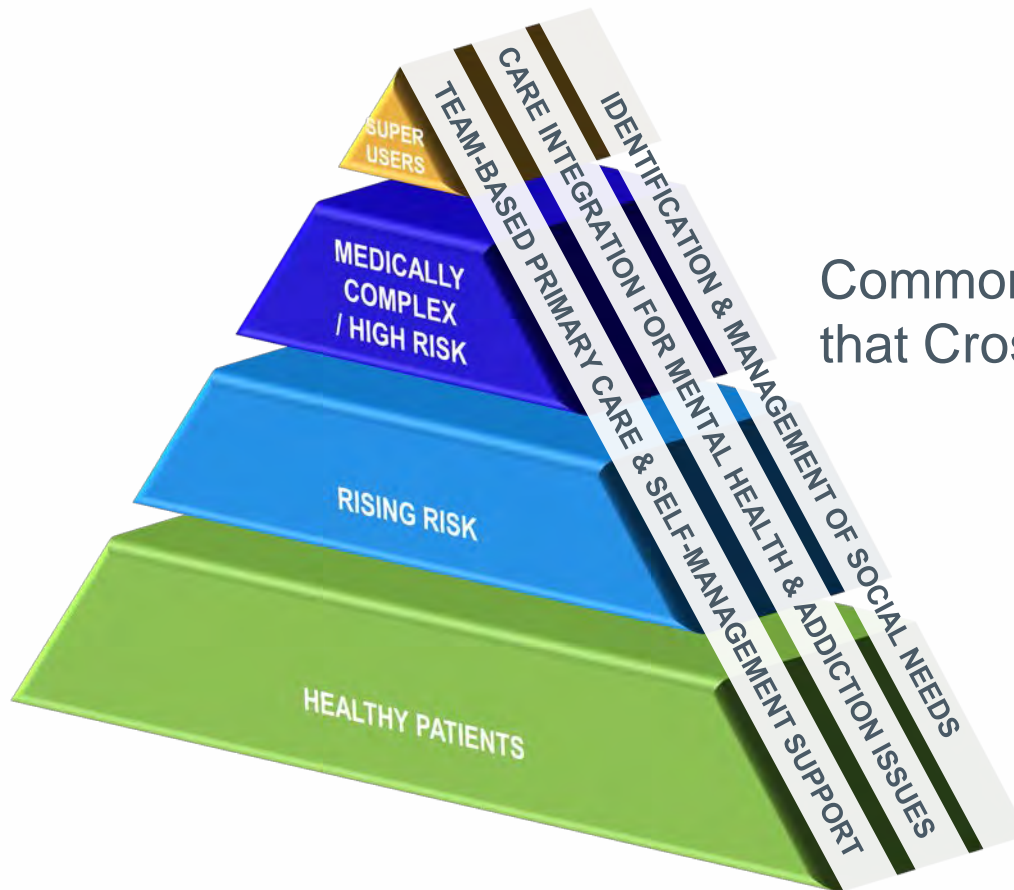


Different Segments
Have Different Needs

Step 1: Population Segmentation & Understanding Barriers to Care



Step 1: Population Segmentation & Understanding Barriers to Care

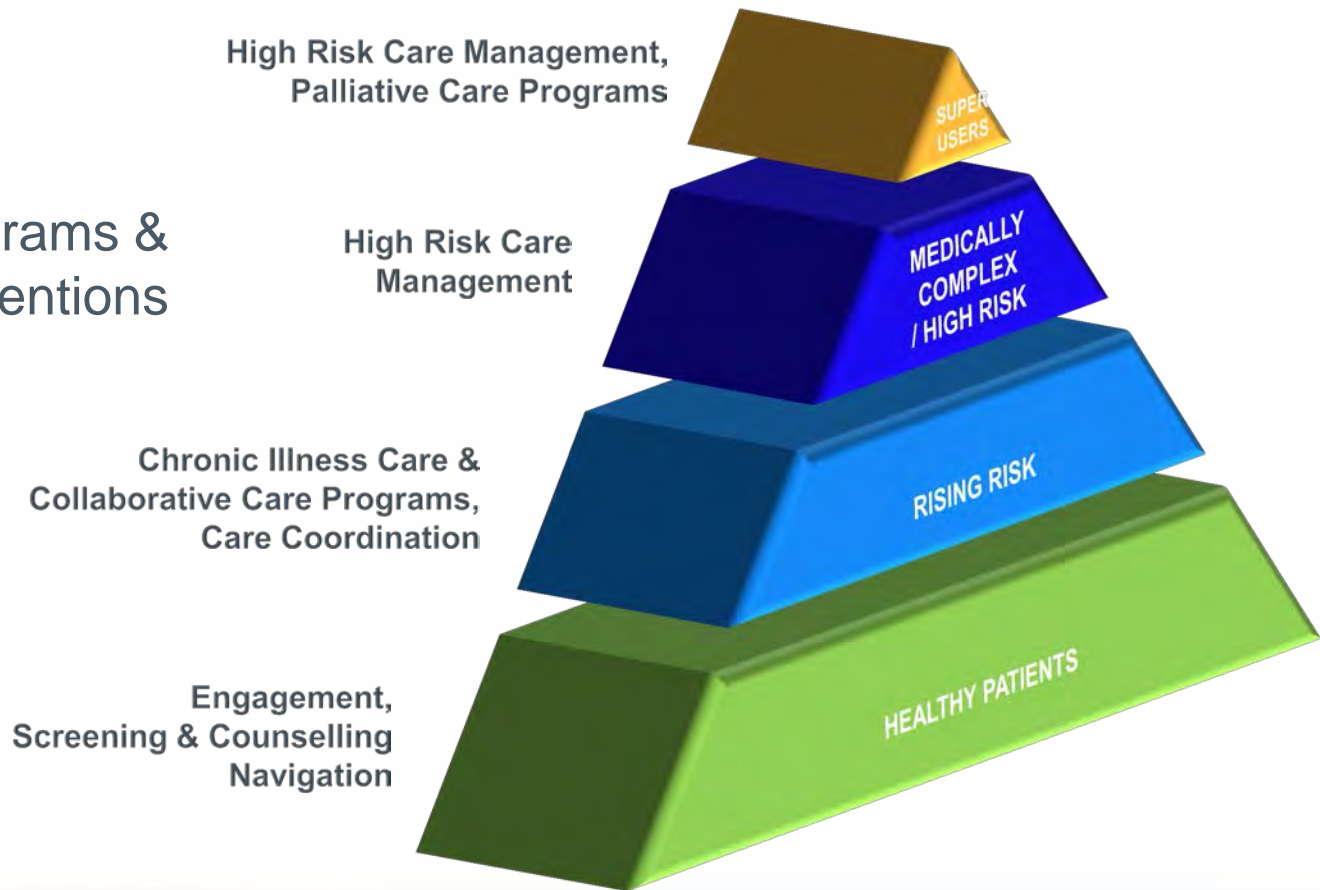


Common Functions that Cross Segments

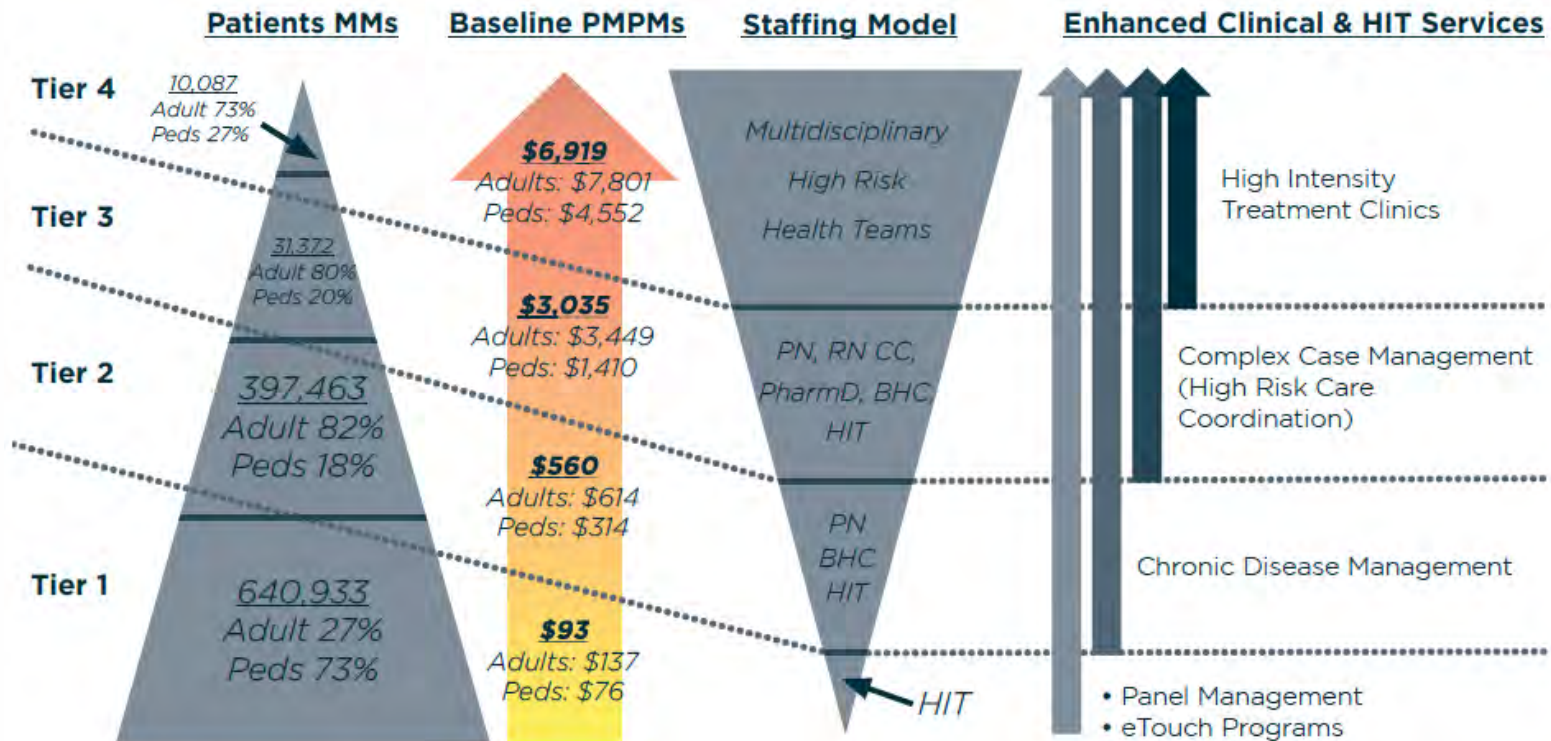
Adapted from: Amy Flaster, MD MBA, Center for Population Health, Partners Healthcare

Step 1: Population Segmentation & Understanding Barriers to Care

Health Programs & Interventions

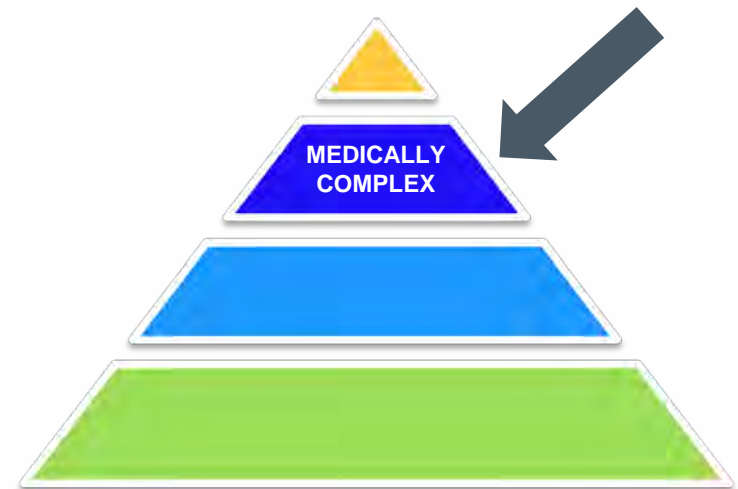


Example: Risk Segmentation at Denver Health Risk Stratification Model for Denver



Example: High-risk Case Management Program at Partners Healthcare

- **High-risk care management program** embedded within primary care
- Focuses on **chronically ill, medically complex patients**
 - ✓ Multiple chronic illnesses (some severe and persistent)
 - ✓ Mental health or substance abuse complicating medical conditions
 - ✓ SES factors complicating medical management
- Predictive risk score used to **segment & identify population, supplemented by social risks** from EMR
- **Enrollment confirmed** by primary care clinicians



Source: Amy Flaster, MD MBA, Center for Population Health, Partners Healthcare

Example: High-risk Case Management Program at Partners Healthcare

▪ Delivery System Redesign

- Care manager with roster, embedded in primary care
- Use of home visits, tele-monitoring, virtual care, post-acute integration

▪ Clinical Decision Supports

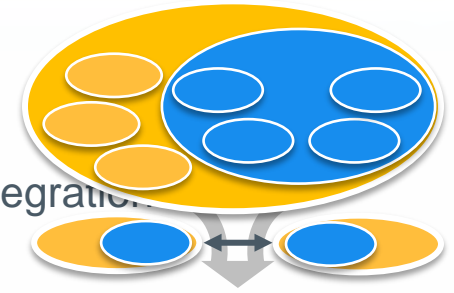
- Structured care plans, goals of care conversations, case reviews
- Ongoing support & training for teams & staff

▪ Clinical Information Systems

- Registries & care coordination tools
- Real-time notifications of admissions & discharges

▪ Patient Self-Management Support

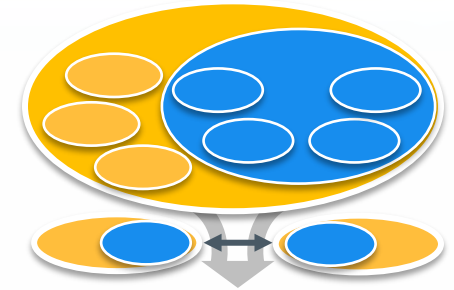
- Health coaching & shared-decision making tools



Source: Amy Flaster, MD MBA, Center for Population Health, Partners Healthcare

Example: High-risk Case Management Program at Partners Healthcare

- **Care Manager** has panel of patients with target panel size
 - Medical complexity – RN Lead
 - Psychosocial complexity – social worker lead
 - Community/social complexity – community health worker lead
- **Responsible for...**
 - Patient assessment (risks, gaps)
 - Care plans and systematic case reviews
 - Care coordination, communication, transition planning
 - Goals of care conversations, self-management support
- Supported by **community resource specialist, pharmacist**



Source: Amy Flaster, MD MBA, Center for Population Health, Partners Healthcare